

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***EXECUTIVE SUMMARY***

PROPOSED

Title V / Synthetic Minor, Construction / Operating

Permit: V-08-004

Western Kentucky University

Bowling Green, KY 42101

May 15, 2008

Lisa Beckham, Reviewer

SOURCE ID: 21-227-00012

AGENCY INTEREST: 11402

ACTIVITY: APE20070001

**SOURCE DESCRIPTION:**

The Division received a renewal application from Western Kentucky University (WKU) on December 5, 2007 and additional information on February 6, 2008. WKU is a public university that operates several indirect heat exchangers to meet the heat demands of its campus. The facility includes 2 coal-fired units (46.6 and 50.5 MMBtu/hr), three larger natural gas-fired units (72.8 MMBtu/hr, 72.8 MMBtu/hr and 20 MMBtu/hr), and numerous small natural-gas fired units (less than 10 MMBtu/hr). There are also numerous emergency generators throughout the campus and a paint spray booth for miscellaneous maintenance surface coating needs. The paint spray booth was previously listed as an emission unit (EU 09) but after a tour of the facility it was determined that the unit qualifies as an insignificant activity, because it is equipped with a properly designed and operated particulate control device and uses less than five gallons per day, verifiable by appropriate records, of air-dried coating material.

This is the facility's initial Title V/Synthetic Minor permit. WKU has requested to change from a Conditional Major source to a Title V/Synthetic Minor source, by increasing the facility's permitted coal usage to 10,000 tons per year, raising the allowable sulfur content of coal to 1% and increasing the source-wide limit on SO<sub>2</sub> to 225 tons per year. This change will give WKU the ability to meet increased heat demand as its campus expands. Additional changes to the facility include the removal of older small indirect heat exchangers and replacement with newer, more efficient units. The source-wide limit on natural gas use remains unchanged at 750,000,000 scf.

On April 14, 2008, WKU submitted an application for a minor revision to the permit. The changes include: the addition of a biodiesel pilot learning laboratory (0.151 MMBtu/hr diesel-fired water heater), replacing the 25kW emergency generator in Jones Jagger Hall with a new 25kW emergency generator (limited to 500 hours of operation per year), and the addition of a ceramics studio spray booth (PTE less than 1,000 lbs/yr of HAPs and less than 5 tpy of non-hazardous regulated air pollutants). All of these changes classify as insignificant activities and have been incorporated into the permit.

## **PUBLIC AND AFFECTED STATES REVIEW:**

Affected states (Tennessee) were notified of the issuance of the draft permit on March 24, 2008 via e-mail. On April 1, 2008, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in the *Bowling Green Daily News* in Bowling Green, Kentucky. The public comment period expired 30 days from the date of publication.

No comments were received during this period. The final determination of this Division is that the proposed operation will comply with all air quality regulations and requirements. The permit is now being issued as proposed. A final permit will be issued after the U.S. EPA's 45-day review.